

### **Remarks and Arguments**

Applicant's attorney thanks the examiner for his time in a telephone interview conducted on October 20, 2006. The matters discussed during that interview are included in the discussion below.

Claims 2-5, 7-15, 17-20, 22-30 and 33-36 have been presented for examination. Claims 22-30 and 34-36 have been amended. New claims 37-38 have been added.

Claims 17-20 and 35 have been rejected under 35 U.S.C. §112, second paragraph, for failing to particularly point out and distinctly claim the invention. In particular, the examiner claims that, for example, claim 35 recites method steps rather than structural limitations and requests that the claims be reworded to recite an entity programmed to accomplish a function instead of reciting an entity that performs the function. Applicant disagrees with this request as unduly limiting. The examiner effectively is requesting that claims 17-20 and 35 be limited to a programmed processor in a computer. While such an embodiment is disclosed in the specification and is the most likely embodiment with current technology, it would be obvious to one skilled in the art that the invention could easily be constructed with firmware or special-purpose circuitry, indeed, that is the way it would have been constructed only a short time in the past.

Contrary to the examiner's assertion that the claims do not recite structural limitations, it is apparent that claims 17-20 and 35 recite only structure. Claims 22-30, which were inadvertently amended to depend from claim 36, have been amended to depend from claim 35. For example, claim 35 recites a recommendation database management system, a profile generator, a recommendation unit and a presentation unit. The operation of each unit and its relationship and cooperation with the other units are also recited in the claim. Each of the units could easily be implemented in hardware. For example, a database management system is a well-known which manages data. It includes a memory and circuitry for writing data into, and reading data from, the memory. The recommendation unit could be implemented with hardware address generators. The presentation unit definitely includes hardware, for example, claim 25 recites that the presentation unit comprises a display and an input mechanism,

both hardware devices. Thus, the rejection of claims 17-20 and 35 (and amended claims 22-30, by implication) is hereby respectfully traversed.

Claims 2-5, 7-10, 14, 17-20, 22-25, 29 and 33-36 have been rejected under 35 U.S.C. §102(e) as anticipated by U.S. Patent No. 6,249,785 (Paepke, previously cited.)

The Paepke system has been discussed in detail in responses to previous office communications. As previously mentioned, recommendations generated by the Paepke system are derived from ratings assigned to books by a user. In particular, in the third embodiment disclosed in Paepke, which was indicated in the interview as being the closest embodiment, recommendations are derived from books read by a user by assigning a rating given by the user to each book to other books "linked" to that book and then using the resulting rated linked books to produce the recommendations. This operation is shown in step 133 of Paepke Figure 19 in which "values" assigned to each of the user-read books are assigned to all other books linked to that book (as described in Paepke column 9, lines 30-46.) Tables 141-143 in Figure 21 show the steps in this process as books linked to each user-rated book 140 are assigned the user's rating to produce the final table shown as table 143. Finally, in step 137, the books already read by the user are eliminated from the table 143 to produce table 144 (shaded items have been eliminated) and the remaining items are used to generate a recommendation (Paepke, column 9, lines 52-58.) Thus, to the extent that "links" between books represent books that have similar ratings, it is clear that this is only a starting point in the Paepke rating system. This starting point is then used to convert the user's own ratings into the final recommendations.

In the present invention, recommendations are based on distances between ratings assigned to items by people other than the user. The user's own ratings of the items do not enter into the recommendation process. Applicants consider this methodology to be superior because by using an additional dimension of "liking" as represented by the user's own rating, Paepke assumes, because a user gives a book a particular rating, that other users would give the book the same rating. This is so whether or not the other users actually did give the book that rating. The present invention does not assume that is the case and uses the actual ratings assigned to the items by the other users.

This difference is present in the claims. For example, amended claim 34 recites that a database containing distances is maintained, and recites, in lines 6-8, "... each distance in the database is calculated by first calculating the difference in preference ratings obtained from a respondent in consumer preference test for that pair of preference items ...". Claim 34 further recites that a processor is controlled, in lines 13-19 "... to scan the database and to form a collection of consumer preference items including each consumer preference item wherein the stored distance between each profile sample item and that consumer preference item is less than or equal to a predetermined fixed distance ...". Finally, a recommendation is generated by "presenting the collection of consumer preference items to the customer as a recommendation."

Therefore, contrary to the Paepke system, it is clear that no user ratings are involved in the claimed method of generating recommendations. In order to perform a similar generation of recommendations, Paepke, would have to provide the linked books in the permutation table in Figure 20 to the user as recommendations, something which Paepke clearly does not do. Thus, steps (c) and (d) recited in claim 34 are not taught or suggested by the Paepke patent and, accordingly claim 34 patentably distinguishes over the cited reference.

Claims 35 and 36 have been amended in the same manner as claim 34 was amended and contain similar limitations. Therefore, they also patentably distinguish over the cited reference in the same manner as claim 34. Claims 2-5 and 7-10 are dependent on amended claim 34 and to incorporate the limitations thereof. Accordingly, these latter claims also patentably distinguish over the cited Paepke reference. Claims 17-20, 22-25 and 29 are either dependent or have been amended to make them dependent, either directly or indirectly, on claim 35 and to incorporate the limitations thereof. Therefore they distinguish over the cited reference in the same manner as claim 35. Similarly, claim 33 is dependent on claim 36 and incorporates the limitations thereof. Therefore it distinguishes over the cited reference in the same manner as claim 36.

Claims 11-13, 15, 26-28 and 30 have been rejected under 35 U.S.C. §103(a) as obvious in view of Paepke. Claims 11-13 and 15 are dependent, either directly or

indirectly, on claim 34 and incorporate the limitations thereof. Therefore, they distinguish over the cited reference in the same manner as claim 34. Claims 26-28 and 30 are dependent, either directly or indirectly, on claim 35 and incorporate the limitations thereof. Therefore they distinguish over the cited reference in the same manner as claim 35.

New claims 37-39 have been added to cover an embodiment of the invention in which recommendations generated by the inventive system are used as sample preference items and the recommendation process is repeated using these new sample preference items in order to refine the recommendation. This refinement process is illustrated by arrow 218 in Figure 2 and described in the specification at page 10, lines 28-30. Such a refinement process is not disclosed or suggested by the Paepke patent.

In light of the forgoing amendments and remarks, this application is now believed in condition for allowance and a notice of allowance is earnestly solicited. If the examiner has any further questions regarding this amendment, he is invited to call applicants' attorney at the number listed below. The examiner is hereby authorized to charge any fees or direct any payment under 37 C.F.R. §§1.17, 1.16 to Deposit Account number 50-3969.

Respectfully submitted

/paul e. kudirka/  
Paul E. Kudirka, Esq. Reg. No. 26,931  
LAW OFFICES OF PAUL E. KUDIRKA  
Customer Number 64967  
Tel: (617) 357-0010 Fax: (617) 357-0035

Date: 2006-12-08